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## POPULAR AND PRACTICAL ENTOMOLOGY.

### SOME WINTER INSECT LIFE.

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The cabin was a ranger station in the foothills of the Sierras, five miles from a small town called Dunlop, in Fresno County, California. In August the hillside close to the northern side of the cabin was dry, the grass was yellow, and even the brush a few rods away had a parched look. No insect life stirred in the dry, hot atmosphere. The winter rains, however, changed all this. By February everything was transformed. The hillside close to the cabin was green and numerous flowers were beginning to bloom everywhere. A great many insect holes appeared among the grass stems. These were of various shapes and sizes. The ranger, who was also an entomologist, was curious. So one Sunday, assisted by his deputy, an investigation began. Ant hills were common. The unknown possesses a lure much greater than the known. We merely noted that two species had homes on the hillside. Four other varieties of freshly-made holes invited our attention. Two were about three-eighths of an inch across with ant-like mounds around the entrance. The earth pellets, however, were of two kinds, one fine and granular, the other conglomerate, irregular masses composed of twelve to twenty grains of earth. The former proved to be a spider. Spiders are "common" to a coleopterist. We were not interested. The latter type of hole, however, produced a female *Bradycinetus horni*, Rivers. The next hole produced a male. Once we found the male and female in the same hole. In all we collected thirty-two specimens in holes of varying depths of from six to twelve inches. This is a rare species. We almost forgot the other holes, one of which was a horizontal slit in the hillside about three-eighths of an inch high and one and a fourth to one and a half inches in length. On the lower edge extended the "dump" of fine particles of earth, much like that at the mouth of a mining tunnel. These slits were not few. They existed in hundreds. Exploring the mountainside in all directions gave the same result. They were everywhere. The burrows extended horizontally an inch or two, and then perpendicularly for about eight inches. We explored half a dozen and each gave up a nice, fat blue-black scorpion. Thousands in our dooryard and we had lived there two years and had not seen them! We still had one other variety of hole. This was larger than any we had explored, about an inch across. One to one and a half inches below the surface the hole was plugged with earth. This plug was one to two inches thick. Below was an opening, a hole somewhat larger in diameter than the portion above the plug. We followed the hole down twenty-eight inches and found a round, fat, female *Pleocoma fimbriata*, Lec. She was reddish in colour, shiny, and lay on her back feebly waving her legs. That day we dug twenty-four from a varying